#### 2015 BSEE Domestic and International Standards Workshop

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Freeport-McMoRan perspectives on the development of processes to address lifecycle management, equipment reliability and subcontractor management issues





#### Who is Responsible

- Who is responsible for Quality and Compliance to Industry Standards.....
  - The Equipment Manufacturer
  - The Supplier of the Product or Service
  - Don't Inspect Quality into the Product or Service
  - Ensure understanding of the Difference, objectives, and deliverables for:
    - Quality Control
    - Quality Assurance



#### Equipment Reliability



- Follow §250.1916
  - Understand it is a Program (Systems approach)
  - Define Fit for Service
  - Define "all equipment"
  - Define Critical
  - Develop Minimum Requirements for all aspects of Well Delivery



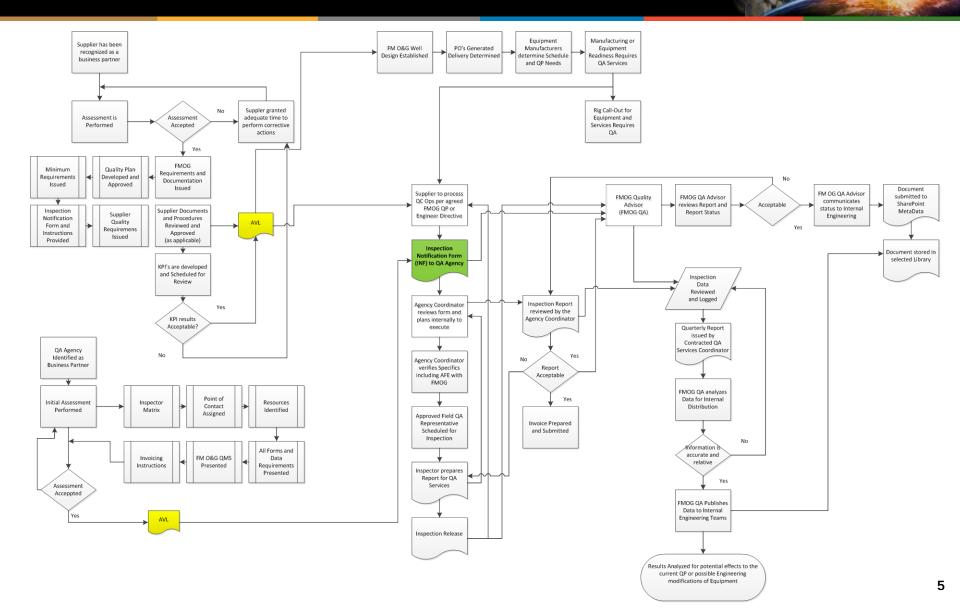
#### Equipment Reliability



## Equipment Reliability

- Follow API RP 75
  - Change "should" to "shall"
  - Understand "appropriate service requirements, manufacturers recommendations, and industry standards"
  - Understand it is a "strategy"
  - Alignment with Operations
  - Include Procurement Start the Strategy
  - Define Critical

## Equipment Reliability Responsibility





### Subcontractor Management

# Subcontractor Management for Equipment Reliability actions:

- Documented (PO and Req) Communication of Minimum Requirements for Equipment and Services
- Assessment of Equipment and Service Providers to Industry Standards
- Clear Expectations for Quality and Reliability
- Scheduled review of Performance
- Develop Minimum Requirements for:
  - Contracted Field Resources
  - Suppliers of Equipment and Services



### Lifecycle Management



- API Standard 18 LCM being developed
  - Implement Q2 through the Organization
  - Work with Operations to determine "where" LCM needs to be applied
  - Develop a Service Base that understands LCM
  - Develop Business Partners for continuous improvement

# Questions?

